

**APPARATUS AND METHOD FOR TRANSPARENT LAYER 2
ROUTING IN A MOBILE AD HOC NETWORK**

ABSTRACT OF THE DISCLOSURE

For use in a mobile ad hoc network (MANET), a first MANET node for routing data packets using Layer 2 information. The first MANET node comprises: 1) a radio frequency (RF) transceiver for wirelessly communicating with other MANET nodes; and 2) a controller for receiving incoming data packets from the RF transceiver and sending outgoing data packets to the RF transceiver. The controller receives a first data packet from an Internet protocol (IP) layer associated with the first MANET node, determines a first medium access control (MAC) layer address associated with the first data packet, and adds the first MAC layer address to the first data packet.